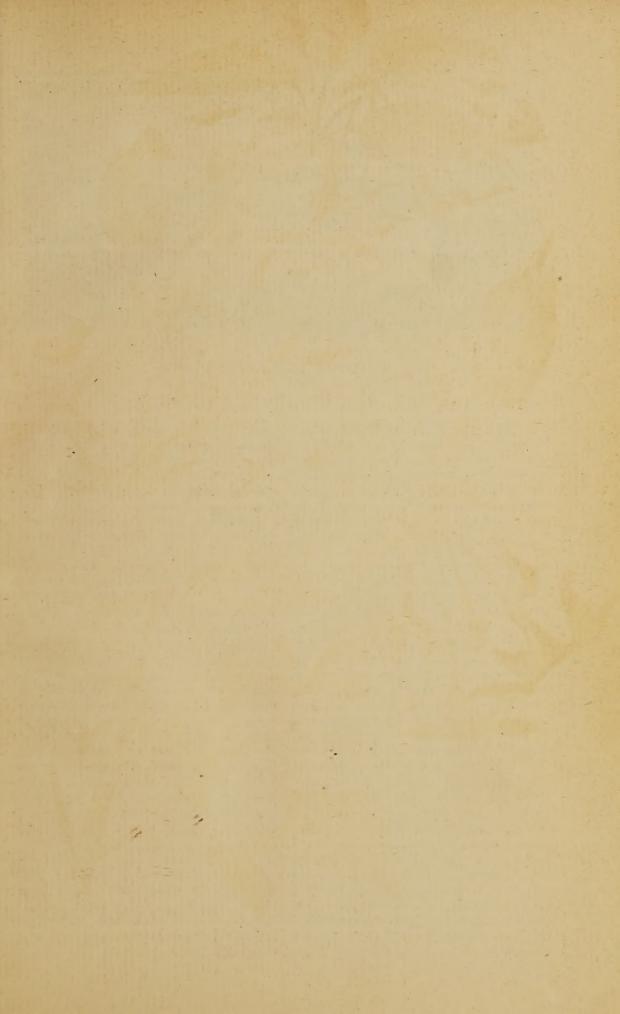
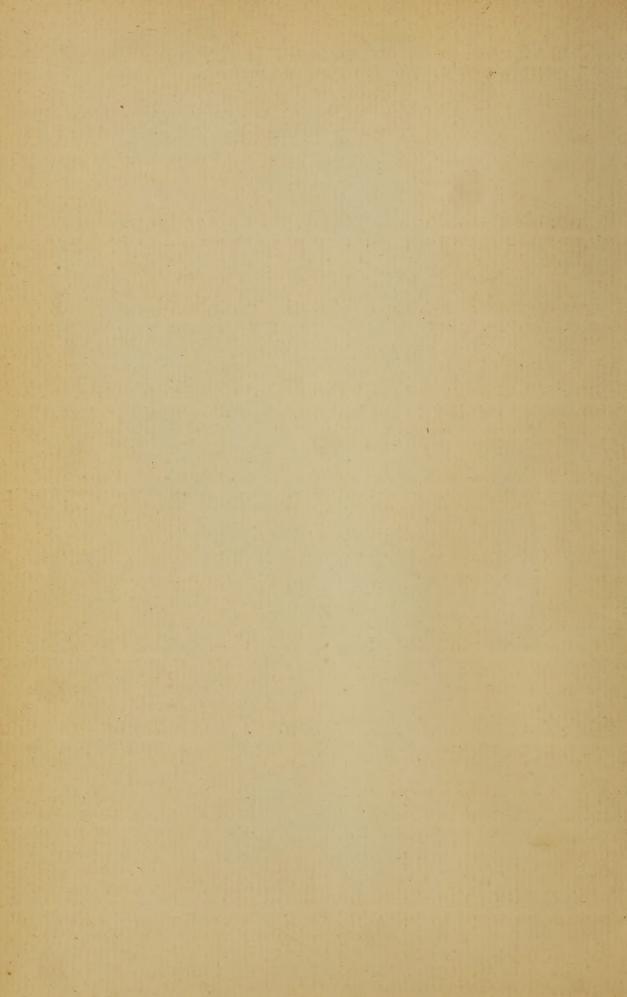
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JANUARY, 1889.

A FEW FACTS in practical horticulture which another year's experience has fully established and confirmed may be profitably considered now, at the commencement of a New Year. These facts relate both to the operations of the gardener and the fruit-grower, and to varieties of plants. Some of the points of our recount may seem already trite to some, but to most readers it is believed they may be the "line upon line" needed to enforce their truth.

Apple orchardists have abundant cause for mutual congratulation in the fact that they have the means, without great expense, of destroying the codlin moth and thus securing sound fruit, free from the disgusting larva of this insect. Spraying the trees with water and Paris green or London purple at the time the blossoms are falling, or immediately after, and repeating the operation about two weeks later has the effect to so great an extent to prevent the deposit of the insect's eggs and to destroy the larvæ already hatched, that the crop is almost wholly saved from injury, A much greater number of orchardists have tried this method the past year than ever before, and their testimony is all to the same effect. Only when the operation has not been well done, or when heavy rains immediately after have washed away the poison, have there been partial failures; in all cases the results have been

good, and whenever the spraying has been thorough, and repeated as needed, the destruction of the insects has been nearly complete. Our inquiries have revealed the fact that at the most only one or two persons in a neighborhood of apple growers have yet put this operation into practice. Most farmers who have orchards have not attempted it. take their chances with the hope of getting a profitable crop without spraying. It is a vain hope, and may as well be renounced first as last. The moths are so numerous everywhere that only by promptly spraying the trees at the proper time can a crop of sound fruit be expected. All apple growers should practice spraying next spring, and make preparation for it before hand by supplying themselves with suitable casks and force-pumps for the purpose, and be ready to use them as soon as the blossoms fall.

In the vegetable garden great labor and loss has been incurred for many years by the ravages of the cabbage worm, the larva of the cabbage butterfly, Pieris brassicæ. For a long time past numerous experiments have been made with a great variety of substances to destroy it or successfully keep it in check, but all have failed as reliable and economically practical, except that of dusting the plants with Pyrethrum powder, simple or combined with other efficient

substances. By applying the powder with a bellows the work is quickly done, and the cabbage grower has no longer any fear of this troublesome and detructive enemy.

Grape growers in this country, in all but the northern portions, have had a disease to contend with that has rendered their work nearly or quite profitless. Reference is made to the Black Rot, a fungus parasite of the fruit. This has been the great bane of the vineyardist in all that central belt of country where the climate is most suitable to the perfect growth and ripening of the fruit, and great areas of vineyards have been destroyed and abandoned on account of it. Many of our readers are only too familiar with this Grape pest, and most of them have some information concerning it, and the efforts that have been made by the Department of Agriculture at Washington, through the Botanical Division, to learn the life history of the fungus, and to discover practical means for its destruction. Professor F. LAMSON SCRIBNER has been prominent in this work, and has operated in connection with PIERRE VIALA, Professor of Viticulture in the National School of Agriculture, at Montpellier, France.

In a recently issued Bulletin (No. 7) of the Section of Vegatable Pathology, Professor Scribner gives an account of his latest experience with the Black Rot, together with a very full statement of its distribution, severity, varieties of Grapes attacked, conditions favoring development, and its origin and history. In regard to its origin, he says: "The existence of the Black Rot in the interior of virgin forests upon most of the wild species of vines of the United States, from the Rocky Mountains to the Atlantic, and from Canada to the Gulf of Mexico, proves beyond question that the disease is of American origin."

As hereafter, in these pages, will be published the means that have been successfully employed to counteract the Rot, they will not be noticed now. But in regard to the result, Professor Scribner uses the following language: "During the past season (1888) the value of the salts of copper in treating Black Rot, but doubtfully indicated by our experiments in 1887, has been fully demonstrated. Of the several preparations employed—Bor-

deaux mixture, eau celeste, ammoniacal carbonate of copper, and sulphatine-the first named has given by far the best results. All have been about equally efficacious in protecting the vines from mildew (Peronospora), and it is difficult at this time to account for the diversity of action. In respect to the latter disease, however, the results obtained where the Bordeaux mixture has been properly applied, both in this country and France. are so clear that we have no hesitation in saying that the Black Rot is conquered. It may now be combatted successfully. and by a method that is economical and perfectly practical in vineyards of the largest size."

Professor Viala says, in the same connection: "The results of the treatments are not yet perfect, but for the present they afford the assurance that Black Rot may be effectually overcome by the salts of copper, and that the same applications will serve to prevent the development of mildew and of this disease." Vine growers may certainly be hopeful with these statements.

Another year's cultivation of the new Potato, Ohio Jr., confirms more fully the estimate we have already expressed of the productiveness of this excellent early variety, and we place it at the head of the list of early kinds, either for the family or the market garden, but the market gardener especially should satisfy himself of its merits by trial.

The Dwarf Champion Tomato has proved to be a very superior variety. The plant differs from other kinds by its stocky, bushy habit, allowing it to be planted closer than others. It is very productive, and it is estimated to produce a larger amount of fruit than any other kind in cultivation. The fruit is of medium size, purplish red color, solid and quite heavy, quality good, among the earliest to ripen, and when ripe the fruit is well colored all over and quite up to the stem-no green part about the stem. as in many kinds. One peculiarity is that the fruit grows larger in size the latter part of the season. This variety was raised by Mr. F. E. BLACK, of Marion, Ohio, from seed saved in 1884, from selected plants of the Acme.

The McCullom Tomato has proved with us to be an excellent large and solid early sort.

After sufficient trial we are enabled to mention the Irondequoit Muskmelon as a fruit of great merit. It is of roundish form, often twelve inches and more in diameter, ribbed, the surface netted and of a grayish color. The thick, orange colored flesh is of delicious quality. This Melon will not fail to please those who give it the care to raise it properly.

The Ideal Cauliflower has again, this season, shown itself to be the most desirable, earliest, and, all things considered,

the best variety in cultivation.

For a Cabbage, both for early and late use, too much can scarcely be said in favor of a variety called All Seasons. Though not the earliest variety, it comes into use soon after the earliest, and keeps well into the winter. It is quite sure to head; heads of medium size, roundish oval, solid, and of fine quality.

Among Beets we have a good word to say of Bastian's Early Turnip and Dewing's Turnip Beet. They are both excel lent varieties, and growing in favor.

The Chantenay Carrot appears to be the most desirable of the stump-rooted varieties. It is of good size, good color, of good quality for the table, and, as it is quite productive, it is really good for any purpose.

The Gironde, or Ox-heart, Carrot grows shorter and thicker than the above, though not quite equal to the

Chautenay in quality.

The Golden Heart Celery has maintained its high reputation the past season, and may be regarded as the best self-blanching variety. As its name implies, the leaves and leaf-stalks are a rich creamy shade; solid, crisp, tender, and of excellent flavor. It is a good keeper.

Of the plants that deserve special mention here, none is more worthy than Begonia Louis Bouchet. The plant justifies all the good things that have been previously written of it in our pages. It makes a beautiful house plant.

Begonia semperflorens gigantea rosea is another fine variety. It makes a grand pot plant for the greenhouse or the

window.

The bright yellow Abutilon, Golden Fleece, proves to be an excellent bedding plant. It is the finest yellow variety that has ever been produced.

The Double Bouvardias, Sang Lorraine and Victor Lemoine, appear finer the present season than ever, and there is no doubt that they will rank as first-class standard varieties.

The white Carnations, William Swayne and L. L. Lamborn, which were described in our pages last year, are now again showing themselves among the best. Silver Spray, another white, may be mentioned in the same class. Orient, a crimson, and Paxton, white flaked with scarlet, are both varieties of Carnations of superior merit.

The new dwarf French Cannas appeared very fine in the open ground the past season, and there is much to be expected from them. The flowers are large and fine, excellent colors, and the plants bloom freely.

Lambertii, a variety of Chinese Hibiscus, color vivid crimson, is a fine thing.

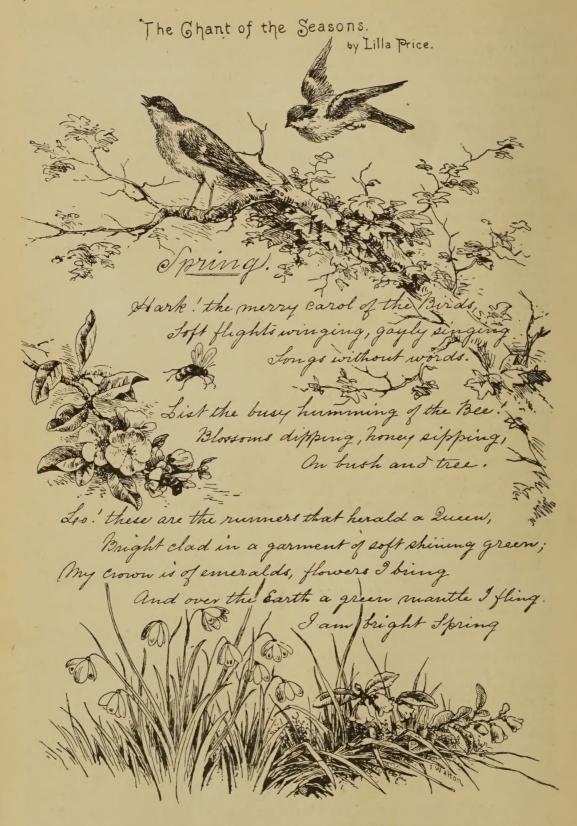
Of Chrysanthemums, Geraniums and many other things there is too much to say to mention them here.

The Golden Queen Raspberry has again proved to be a very productive sort. The berries are large, handsome, and of excellent quality. For the family garden it is very desirable; in the market the red varieties are preferred.

The Jessica Grape is a variety as yet but little known. We have no hesitation to advise it as one of the most desirable kinds for the private garden. Its quality is high, and it is one of the first to ripen, coming into use a week or more before Delaware. It is a good grower, with good foliage, and can be depended upon to stand the sun. Size of cluster and berries about the same as Delaware; color green.

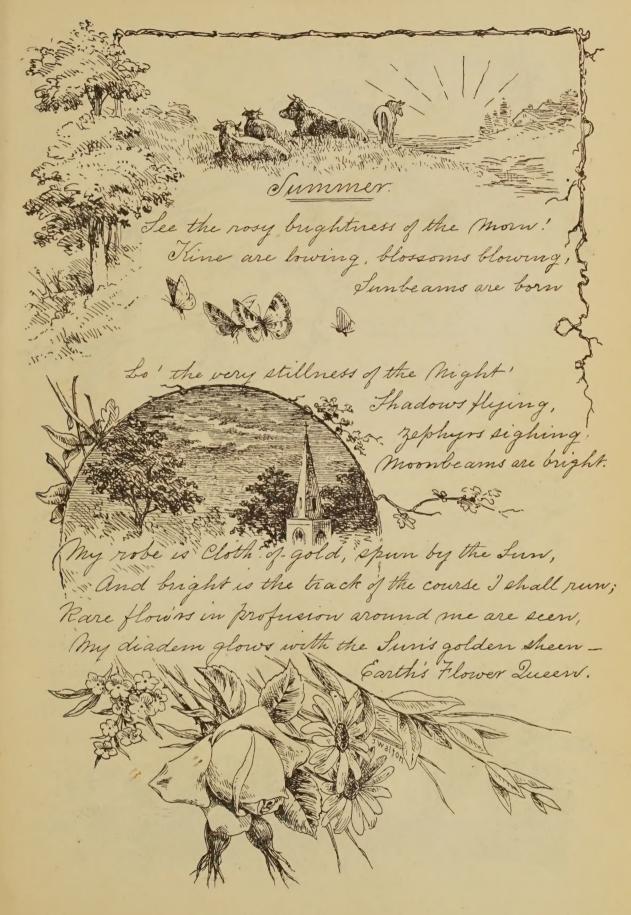
The Diamond Grape, of which a most favorable opinion has heretofore been expressed in these pages, has as yet shown no fault or flaw in any respect in any essential quality of vine or fruit, and it undoubtedly now stands in advance, all things considered, of all the varieties of white native Grapes in cultivation. Its season is but little, if any, later than that of the Delaware. It must become very popular when well known.

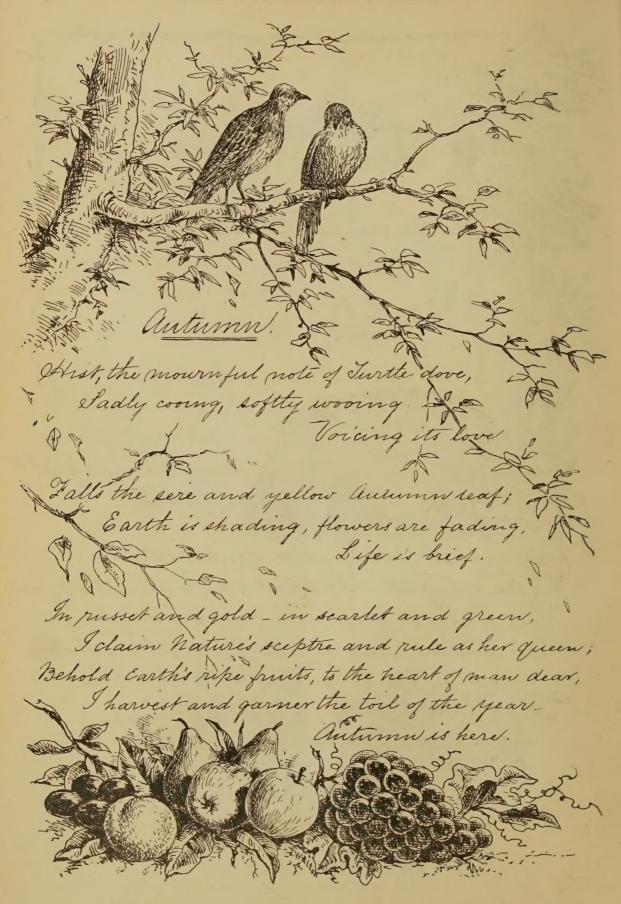
The Vergennes and the Worden have now been so long before the public it may be thought needless to mention them, but to some it may prove a "word fitly spoken" to say that these varieties are thoroughly reliable both for the private garden and the vineyard.



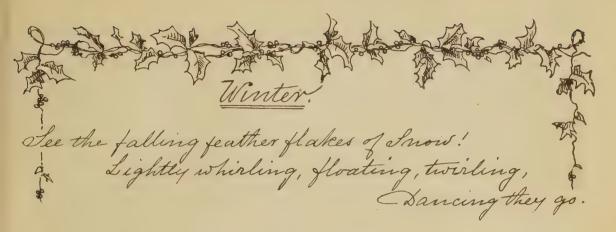
SUMMER.

5





WINTER.



Alear the gentle patter of the raw!

On window pane.

Peure snowflakes, bright crystal drops, diamond hued

Lo! these are the jewels bedecking my train,

The Frost Queen am I, a maiden of snow_

my reign is most fateful for weal and for woe: _

In me the dear Christ came, the Caviour of all,

Redeeming the world from its boundage and thrall.

I bring many sorrows, and joys not a few,

The death of the Old year, the birth of the New;

And mortals look forward to me and my reign

and invineer with bleasure, or mutter with pain



A FLORIST BY PROXY.

A noticeable large, white stone house, partly hidden by trees standing some two hundred feet above the water level, will be pointed out to the Hudson River tourist, as he passes just below Tarrytown, as the home of JAY GOULD, and he will also get a glimpse of some very large conservatories at a little distance from the residence.

One day, while attending the Florists' Convention, in New York, toward the close of August, I received an invitation to spend a day with a friend at Irvington, twenty-three miles up the Hudson, on the H. R. R. R. The day was set, and in due time I alighted from one of the many accommodation trains that ply daily between New York and Fishkill. Much to my disappointment, I found my friend had been suddenly summoned away by telegraph, and in a village of strangers I was thrown upon my own resources. Should I return to the sweltering city to await my departure on an early evening train, or stop and see what I could in a place which once witnessed the daily life of Washington Irving, and whose every lane and by-way was in some way famous? It didn't take long to decide, and wending my way up the village street, I asked the first person I met to direct me to the house that was once the home of IRVING. He told me to follow the village street up the hill to the end, about half a mile, and then turn north, and about half a mile further I would come to an electric light slung across the street, just beyond Sunnyside Lane.

Proceeding on my way, I soon arrived at the spot, and soon found Sunnyside Lane running down toward the village in a diagonal direction, in the midst of a primitive forest enlivened by running water. I did not have to go more than twenty rods before I saw the house I had so often seen in pictures. It stood back in a sloping dooryard, a little way from the road, amidst many trees and uncut grass, in striking contrast to the macadamized road, the electric lights and the gay carriages I had left in the main highway above.

This main road, or turnpike, with modern improvements is, I fancy, quite recent, and Sunnyside Lane, the original road, winding up from the river landing

to the higher ground beyond. The Ir-VING mansion is an old-fashioned, twostory brick, with battlements extending above the gables, and stands side to the road. The hall door is in the center, and the four large upper windows are arched in the Moorish style. The house is open to visitors, I was told, but I did not enter, but retraced my steps to the pavement of the main road, where, still proceeding northward, I came, in a short time, to the massive cut granite wall, two feet thick and four feet high, that encloses the estate and home of JAY Gould. At one point in this wall, which cost a good many dollars per rod, a very beautiful Sycamore tree, about two feet in diameter, stands exactly in the line of the wall. To avoid cutting this tree a projection, like a bay window, has been built around the tree, inside. This bay window part and the ends of the wall connecting have been upheaved so the stones have parted, and I wondered whether this was the result of frost or of tree growth.

At the entrance gate a boy in charge directed me to the residence of the gardener, near by, where I was kindly received by Mr. FERDINAND MANGOLD. who has charge of the place. He cordially consented to show me around, and very soon I was admiring the wonderfully brilliant array of carpet bedding grouped to the southeast of the massive conservatories. Not less than an acre of brilliant flowers and foliage in the brightest of colors, and arranged in huge masses or fancy figures, gave a vivid idea of the decorative power of bedding plants. Either the season must have been extra propitious, or unlimited means must help the gardener, for in all the beds there was no unevenness, and no vacancies. Even such an uncertain grower as the Coleus Golden Bedder seemed on its good behavior and filled its part to perfection. It was not, however, planted beside a great rank variety and expected to keep up, and the same was true in all the beds of other plants. Each was assigned a position in which mature size was considered, and in this much of the perfection lay.

Mr. MANGOLD does not readily throw away good old plants for untried new

ones, and Geranium General Grant was the leading bedder, with Baron Provost second, while Coleus Verschaffeltii was largely in the lead among Coleus. All the new bedders are, however, tested, and I was quite interested in observing a bed of fifty new Geraniums in the trial grounds. According to the critical notions of Mr. M., only two were really good, with a possible third.

Planted in adjoining frames and in the open ground was an immense amount of stuff for fall and winter blooming, to be removed in due time to the greenhouses. Noticeable were two lath screen sheds, covering more than two thousand large Azaleas and Asiatic Rhododendrons.

We passed into the two large Palm houses, circular in form, and nearly one hundred feet in diameter, and containing when filled one of the finest collections of Palms in the world. The benches were being cut down to accommodate the increased growth of the plants, and the plants were huddled here and there, but in their disarranged state one could see many of rare beauty not often seen elsewhere.

Then we passed through two large vineries, from the roof of one of which hung half a ton or more of just ripening Grapes. Against the north walls of these vineries were trained Peach trees, a few specimens of a late variety still hanging to the tree. The earliest were ripe in April. Four or five stems start from each root, and are carried up straight about five inches apart to the height of twelve feet or more. From four to a dozen specimens are grown on each stem, so the total yield is not large.

Close by is a room devoted to over two hundred and fifty varieties of Orchids, and adjoining a little room with sixteen varieties of the tropical Pitcher Plants (Nepenthes). Then there is the fernery, and a room entirely filled with Sago Palms, and still other apartments which I have not space to mention.

From beneath the glass I took a hurried stroll through the grounds, only having time to note the thorough keeping, and the large, thrifty beds of Rhododendrons that must be wonderful in June. The place has been owned but eight years by Mr. Gould, but has been under Mr. Mangold's care for twentyfive years, he having originally laid it out, erected the plant houses, and planted the grounds for a former owner. Mr. M. has full charge not only of the ornamental grounds, but of one hundred and seventy acres across the road, where farming is carried on and a prize herd of one hundred Jersey cows is being formed.

L. B. PIERCE, Summit Co., Ohio.

KEEPING UP AN ORCHARD.

A very large orchard requires a large capital to run it. One might think that this would "go without saying," but it does not-not always. One of the largest orchards with which I am acquaintedsome five thousand trees-though well located upon naturally good land, and set to the best standard varieties about twenty years ago, has not yet nearly paid for itself, and without a heavy expenditure for fertilizing material never can. The land upon which it is planted had been farmed in the ordinary way for many years before these trees were set. At that time it was in fair condition, as mowing, yielding from three-fourths to one ton of hay per acre. It was plowed, set to trees, and subsequently kept in hoed crops, with enough manure to keep the trees growing fairly well. Nothing seemed to be wrong with it until the trees reached bearing size; and then, after several years, it became evident that there was not strength enough in the land to keep up growth and make Apples, too. Since then it has "sort o' lagged along," to use the words of a neighbor, "but don't produce anything, hardly." Other orchards of one-tenth the number of trees, and no older, are actually giving larger and better crops. Now, what is the matter? Plainly, this orchard wants manure, and unless it gets manure, and a good deal of it, and that pretty soon, it will be "gone up" beyond hope.

Mr. Harris' Northern Spy orchard, of which he wrote in *Walks and Talks*, is a case in point, fully illustrating the situation. It was considered a failure until he plowed and manured if, and then it produced big crops of such big fruit that,

if I am not mistaken, less than one hundred of the Apples filled a barrel. But it is going to take an immense quantity of manure to bring up this one hundred acre orchard like that, or any thing near it. In truth, the manure cannot be had, unless it can be brought by the schooner load (and a good many of them,) from some large city to the lake shore upon which this orchard stands. At the ordinary price, I estimate that it would cost not less than seven thousand dollars to get the stable manure into the soil of that orchard which it would require to make it profitably productive. The same effect might possibly be produced for some less money by using, in place of the manure, ground raw bone and Canada ashes. After one good crop has been produced in this way, this orchard could probably be made to keep itself up, and pay a moderate profit on the whole investment. But first there must be this heavy investment of new capital, the necessity of which ought to have been foreseen.

As with a garden, so with an orchard— I have never yet seen one too rich for profit. I have never seen one upon which the last loads of manure did not pay the most profit. The most profitable orchard of the Williams' Favorite Apple in the vicinity of Boston is kept "as rich as a barnyard." The fruit is double what might be called the normal size of the variety; every Apple is handled like an egg, and is got into the market just at its point of perfection. This orchard is very profitable, though small. The only orchard to rival this, that I have seen, is in the city of Montreal, where I saw, some seven years ago, thirty-six trees of Fameuse, the fruit of which was sold ungathered, that season, for \$800. were very large and perfectly healthy trees, which had, all to themselves, about an acre of rich land. It is well known that the Fameuse is an Apple very liable to fungoid spotting. I spent some time in examining the fruit upon these great and heavily laden trees, but was unable to find a single specimen that was not perfectly fair. The trees had been so pruned that all the fruit was on the outside, where the branches lapped over one another like shingles on a roof, each one loaded with fruit like ropes of Onions.

I will not say with any positiveness that heavy manuring is a cure for spotting. But I begin to believe it may be so, and I get more proof of it every season in my own orchard. All the Fameuse family are spotters, its finest seedling, the McIntosh Red, as much as any. Yet I had one tree this year, and only one out of about thirty, that not only bore a fine crop of large fruit, but had not a single spotted one among them, and this tree grows where it gets a constant flow of water from a sink spout, and all the washing water of a family. I have noticed about Montreal that the orchards of large and fair Fameuse are all on deep, rich land. These are the fancy Apples that are so much admired and bring such fine prices. But spotted Fameuse can be found in a great many orchards on the island of Montreal.

I suspect that it will turn out, on thorough investigation, that there is one other factor in regard to this disease of spotting:-manure alone may not cure it, unless the tree itself is quite sound and healthy. Now, with me, the Fameuse is not quite iron-clad. The hard winters hurt it, and several hard winters too close together kill it. McIntosh Red is a hardier tree than Fameuse, but with less hardy flower buds, so that it does not bear so heavily. This being so, I doubt if I can entirely stop the Fameuse from spotting here by high culture. I am aware that the fungus which causes spot attacks the leaves also, and perhaps primarily. But it seems to me that in rich land the chlorophyl is more abundant (certainly the leaves darker), and the whole constitution of the leaf more vigorous and resistant: apple fruit is simply five leaves folded together, united at the edges and filled up on the inside with cellular tissue, may not the outer surface of the fruit-the skin-partake of this same vigor and resistancy? I cannot add Q. E. D., but it looks reasonable, don't it? It follows, then, that an Apple orchard to be kept healthy and continuously productive must have the fertility of its soil maintained by repeated applications of such manures as the trees demand, and if it is a profitable orchard. all the necessary expense will be covered by the proceeds of the crop.

T. H. Hoskins, M. D., Orleans Co., Vt.

FLORIDA AND ITS FLOWERS.

PART I.

The name of this State, Florida, is said to mean flowery, or flowering. The reason of its application to this land by the discoverer, Ponce de Leon, is disputed. Some claim that it was so named because it was discovered on "Pascua florida," Easter Sunday. Others think that it was so named on account of the profusion of wild flowers in bloom at that time. Probably both reasons had something to do with the selection of the name

Doubtless, many tourists would feel inclined to dispute the fitness of the name. This is not strange, for most of them stay in, or very near, the cities or large towns. In clearing the land all the native vegetation has been destroyed, and most of the time there is little or nothing to show that any attempt has been made to replace it.

The fact that there are no flowers growing in a yard is no evidence that no effort has been made to cultivate flowers or ornamental plants. It only shows that whatever has been done in that direction has resulted in failure. This, however, should not be set down as altogether the fault of Florida soil or climate, but rather to ignorance of suitable varieties and the proper method of cultivating them.

Strange as it may seem to those who look upon Florida as a barren waste of sand, the name of Flowery, or Flowering, land is not inappropriate. It is true that there are very dry, sandy knolls in the State, upon which very little vegetation is found. Yet even upon the sand dunes along the sea shore, the poorest and driest soil in the world, there are found a few species of flowering plants, some of which are quite showy. There are, also, in various parts of the State, strips of country known locally as "the scrub," the land in which is very rolling, and the soil is as white as sand ever is in a state of nature. No grass is found on this soil, nor any trees. There are a few scattering, stunted, scrubby Pines, wholly unworthy of the name of trees. These tracts are overgrown with a dense growth of one or two species of shrubs peculiar to them, and a great many plants of Prickly Pear, Opuntia. Yet, in the proper season, even this desolate scrub

must gleam with the golden radiance of these Prickly Pear blossoms.

I have lived in the State something over five years, and I do not remember the time that I could not go into the woods and find one or more species of wild flowers in bloom. It is true that in very cold winter—it was especially so after the freeze of January, 1886—blossoms are quite scarce, and perhaps may, for several weeks, be limited to a few scattering Asters, or some other equally hardy Compositæ. I may safely say that from the middle of February to the first of December there is not a day that a handsome bouquet may not be gathered from the woods in this vicinity. Much of the time the abundance and variety of floral treasures to be found on every side would astonish any one not familiar with the lavish profusion of beautiful flowers with which the Creator has decked this favored portion of the earth. A bare list of the varieties would fill many pages of the MAGAZINE.

I am not a professional nor a scientific botanist, but only an amateur, yet I have a list of over eighty species of plants found in this immediate vicinity, which I have analyzed. This does not include any annuals or biennials, nor any trees nor large shrubs, perhaps six or eight may be small shrubs or woody vines. Among them are included seven or eight species of terrestrial Orchids, and one epiphetal species, Epidendrum conopseum.

I will not undertake the endless task of a general description of each species of our floral wealth. I will simply mention a few which seem to me to be worthy of an introduction to the flower-loving public of the United States. Very few, perhaps none, of them would be hardy north of the Ohio or Potomac Rivers. Most of them could be grown as house plants, or wintered in a cellar and grown in the open ground through the summer.

The Yellow Jessamine, Gelsemium sempervirens, is an evergreen, woody climber, found in rich, moist soils from Florida to North Carolina and westward. Along the banks of small streams and in the edges of the hammocks it is found

running riot over the shrubs and bushes, and festooning the trees so that in many places the tough vines have so interwoven the undergrowth that it is almost, or in many cases quite, impossible to force a passage. During its season of bloom, February to April, such thickets as I have described are gorgeous with the innumerable bright yellow blossoms of this vine. Often the trees by the roadside seem to be decked with garlands, as if in honor of some festive occasion, and the air almost heavy with the delicious perfume of these delicately fragrant flowers. I do not know whether it would succeed as a house plant, but see no reason why it should not. It roots readily at every joint whenever a shoot drops upon the ground, and these layers bloom when quite small.

The Oleander is a common plant in cultivation at the north, and I believe the Yellow Jessamine would succeed under the same treatment. If set in a large pail or small tub filled with rich soil, kept quite moist, and in a warm, sunny situation during the summer, and moved to a light, dry cellar in winter, where it would be cool but not freeze, it would probably thrive and reward its owner every spring with a profusion of deliciously fragrant, bright yellow blossoms.

Another wild flower which adds great beauty to the landscape during its season of bloom, is Zephyranthes (Amaryllis) Treatiæ, very commonly called, in this State, Easter Lily, as it usually blooms about Easter. It was introduced to the northern public a few years ago as the Fairy Lily Though the description was somewhat overdrawn, and some exaggerated claims were made for it, it was really an acquisition worthy of general cultivation. For the benefit of those who are not familiar with it, I will say that it is a small bulb, usually from one-

half to three-fourths of an inch in diameter. It bears a few small, narrow, almost round, leaves, from six to ten or more inches long. In the spring it bears a single, large, pure white, lily-like flower from three to four inches in diameter. Occasionally a very large bulb will bear two blossoms in one season, but this is comparatively rare. If these bulbs were generally offered by seedsmen and florists, and sold on their merits, without misrepresentation and at a reasonable price, it would soon become as popular as it deserves.

Another very early spring flower that should be more widely known, is Xerophyllum asphodeloides. Notwithstanding its formidable botanical name (I donot know that it has a common name) this is a very desirable plant. The small under-ground stem bears a number of very long, narrow leaves, being exact reproductions, in miniature, of the leaves of the old Corn Lily, Hemerocallis fulva. From the center of this cluster of leaves springs the flower stalk, growing to the height of from two to four feet. This stalk bears at the top a large, coneshaped panicle of pure white flowers. These open gradually from the base to the apex through the course of from twoto three weeks. Though pure white at first, they turn pink or rose colored with age, and the cluster of blossoms retains its beauty for a month or more. I have no doubt that this plant would prove to be a very desirable and easily grown house plant. I have heard that it has been introduced into cultivation in England, and has become quite popular. Its very long and, to many, unpronounceable name, would seriously interfere with its popularity in this country, unless it should be re-christened with some name more likely to strike favorably the public W. C. STEELE. fancy.

SATISFACTORY HOUSE PLANTS.

Among the various flowers lauded by enthusiastic florists there are often those which the amateur, or rather, any one utterly without experience in the cultivation of flowers, will do well not to purchase, at least, for introductory experiments. The prospect of success, if it be not the main spring of each human effort

or attempt, is at least necessary to its satisfactory result. Even in a matter of no more importance than the cultivation of a plant this fact should be kept in mind, and a variety selected the nature and habits of which hold out at least a fair hope of ultimate victory. Plants which are really simple in their require-

ments are often a great trial to the horticultural novice, who being ignorant of some little peculiarity of their nature, though so trivial as to be easily managed if only understood, because of want of knowledge with regard to this one point, makes an utter failure of their culture, and loses not only the plants but a great deal of the interest in them—that interest which lifts gardening in all its phases, no matter how much labor it demands, so far above the plane of mere drudgery.

While the floral beauties enumerated in the catalogues of to-day are, too often, from a want of a proper description of their needs, only an ignis fatuus to lead into useless expenditure and disastrous experiences those who have at command only the resources of the living-room, there is yet a long list of desirable plants for people so situated to choose from. The individual making a first attempt at growing house plants should procure such-as do not have too many whims to be gratified, only demanding the vital requisites of all plants (or, I should say, ordinary plants, there being some forms of plant life which thrive upon almost nothing), earth, water, light, air and a reasonable temperature. The Zonale and scented Geraniums are among the most satisfactory specimens of this class. The qualities which commend them to the inexperienced florist are so well known as to hardly need repetition here, and it is scarcely an exaggeration to say that they are as nearly "all things to all men" as it is possible for any kind of plants to be. This is especially the case of the Zonales, combining, as they do, beauty of foliage and flower, and being able to adapt themselves to all circumstances and surroundings, defying the insects which bring to most plants disaster and death, flourishing in a generous compost, or successfully struggling with an inhospitable soil, putting forth their gay blossoms in the torfid atmosphere of the dwelling house, or willingly, if necessary, submitting to the crowning indignity of hanging by the roots in a damp, dark cellar through the long northern winter, only waiting for a chance to brighten the place to which they may be assigned in the spring.

The Scented Geraniums, though of a long-suffering nature, yet "draw the line"

at darkness. Their "prayer, like Ajax," is "for light," without which they rarely exist for any great length of time. To atone for this demand, however, they furnish the only quality wanting in the Zonales—fragrance.

That lovely representative of the same family, the Pelargonium better known as the Lady Washington Geranium, is arbitrary in its requirement not only for light, but for sunshine. Like beauties in general, it is selfish, and unlike them, wishes for the opportunity, not so much, perhaps, to display its attractions as, to develop them by getting near the glass. This one point being yielded to the autocrat, it is no more difficult to grow than many other flowers of far less beauty, which occupy honorable places in the conservatory.

The Flowering Begonias are, as a rule. excellent plants for window culture, being easily grown and free from the ravages of the insect tribe. The importance of this last mentioned fact to those who have only the ordinary window, or, at best, the bay window, for their floral specimens, can hardly be estimated by those who have the greenhouse with all its accessories convenient for the destruction of interloping pests. That it is a grave item for consideration in the choosing of plants, those who have carried their plants over the route traveled by the party of Mother Goose notoriety, "up stairs, down stairs and in my ladies' chamber," in the wild hope of being able to find a place where they can smoke, drown, stifle, or otherwise murder the entomological torments developed on them, can easily testify.

Although the list of Begonias is quite formidable, there are few which, for all purposes, excel the old Weltoniensis. The abundance and certainty of its bloom, its pretty foliage and habit of growth, together with its hardiness and the possibility, if necessary, of its being dried off and set aside for a time to make room for other flowers in their season, are all points which commend it to general favor.

The B. glaucophylla scandens is unsurpassed as a basket plant, and the newer varieties, Rubra and Metallica, are, when well grown, ornaments to any conservatory, being satisfactory both in leaf and bloom.

While a fair degree of success with the Begonia Rex may be hoped for (judging from tradition and observation,) even in the dry air of a living-room, it is not a plant to be advised for those easily disheartened. Its true place is in the humid air of the greenhouse, where, having immunity from dust, and rejoicing in an even temperature, it becomes an honor to the gardener and an ornament to its abiding place. Under my supervision in the atmosphere of the dwelling house, it has grown "small by degrees and beautifully less," and at last, by some means, entirely disappeared. This sort of floriculture, though conducive to poetical thought, calling to mind, as it does, such lines as

"Though lost to sight, to memory dear,"

etc., is not, as a whole, encouraging, and I cannot conscientiously advise any one to try it with any expectation of good results, except the development of the sublime attribute of resignation.

The Chinese Primrose is one of the most desirable of plants for winter blooming, and of the easiest culture, the main facts to be borne in mind being the necessity of mellow soil for the fibrous roots, a moderate amount of water for the same and none for the foliage. The idea which some have imbibed that the Primrose is worthless after the first year, is based upon error and certainly tends to discourage any attempts at its culture by those who admire this charming flower, and would be glad to procure the plants were it not for the supposed brevity of their usefulness. If one wished to grow the Primrose for an exhibition at which prizes were to be awarded for the largest flowered specimens, it would very likely be best to select plants of the first season's growth, but as all do not expect to grow the Primrose for competition and are content with its fragrance and beauty, even while laboring under the conviction that its flowers might possibly be the least bit larger were the plants younger, they may be consoled by the thought that they can retain their floral favorites for at least two or three years,

with a reasonable hope for such a quantity of bloom as will atone for any deficiency in the size of the individual flowers. The Primrose is easily kept through the summer by placing the potted plants in any partially shaded situation out of doors, or by turning the plants out into the border to acquire strength for the winter's work.

The Cyclamen giganteum, now becoming well known to the floral world, is a great improvement on the Cyclamen Persicum of by-gone days, and is one of the best of plants for window culture. I have before me a vision of one which I was so fortunate as to obtain, last winter, with its wealth of dark green foliage rivalling that of the Begonia Rex in the silvery tracery, and hovering above this the cloud of great white flowers just tipped with a flash of color, and looking like butterflies poised above the plant. The Cyclamen is easily propagated, as the seed are not fine like those of many greenhouse plants, and therefore do not, while germinating, require the care and skill necessary in growing plants from infinitessimal seeds, like those of the Begonia, Calceolaria, and others of that The seeds do not germinate so quickly as those of many other flowers, and may be sown for several weeks before all the tiny plants make their appearance above the soil, but once they lift a leaf into the light they are easily cared for, as the sturdy little bulbs appear at the same time, or even sooner, and one is not compelled to spend all their time over the youthful plants, for fear they will get too dry and shrivel up, or too wet and damp off. The bulbs after attaining sufficient size may be placed in the border to remain until September, when they should be potted in the ordinary compost for house plants, care being taken to keep the crown of . the bulbs above the soil, and also not to deluge them with fertilizing liquids, as judging from experience, I should say that the Cyclamen succeeds best in a soil which is not too rich.

MRS. LUNEY, Hoosic, N. Y.



FOREIGN NOTES.

FRUIT FARMING.

The many smoothly written but wholly theoretical articles on the profits of gardening and fruit culture that have been published of late years in the daily and weekly papers of Great Britain, have had the effect, no doubt, as have similar articles published in this country, to induce many persons to turn their attention to gardening and fruit growing who are wholly inexperienced, and with the disastrous results which could only be the issue of such temerity. Great numbers of people in all parts of this country who have succumbed to the combined blandishments of the popular press, the smooth tongue of the tree dealer, and the imaginative real estate agent or land boomer, will recognize, with sorrowful sympathy, the truthfulness of the following experience of an amateur farmer, as given by the London Punch:

Read GLADSTONE'S advice about fruit farming, jam, Cherries, Apples, and all the rest of it, with great interest. Why do the poor congregate in big towns, instead of doing this sort of thing in the country? So improvident! Believe there's a fortune to be made out of growing fruit and vegetables for London market, and mean to try.

Have bought a small farm. Nice light soil. Owner (who seems very anxious to get away), describes it as "pebbly loam." More pebbles than loam, apparently 'Scratch your loam, and you find pebbles." Owner shows me orchard, paddock, cart-shed, &c., and induces me to take over his live and dead stock at valuation.

Settle at farm. Twenty miles out of town. Nearest rail two and one-half miles; cartage to railway costs more than I expected. Have to pay gardener, too; pay him more (I fancy) than either of us expected. Buy some books on fruit farming, and feel rather proud of my position. Shall talk (to friends who don't know much about me), of "my place in the country." Hope they won't come down and find me hoeing Mangel Wurzels.

Rather disappointed with perusal of books. Find Apples don't like a "pebbly loam." Also only a few kinds of Apples have any sale nowadays. Call in a horticultural expert, and ask him to inspect my orchard.

Expert comes. Condemns orchard root and branch. Says, "only thing to be done is to grub up these 'ere trees, and plant noo ones." Well, then, what advantage do I get out of the old trees? "None whatever," he replies; "might just as well have bought a bit of meadow." Depressed. I think of riddle—"What's the good of Acres when you can't get a Bob out of them?" Riddle depresses me still further.

Give up Apples. Plant no end of Cherries and Gooseberries. Gardener says, "important for fruit to go off directly its ripe." Mine goes off before it's ripe. Goes off altogether; boys steal it. Also plant Cabbages and Mushrooms. Gardener says, "A fine opening for Mushrooms." Spend a month or two buying spawn, making beds, &c. What a lot of attention Mushrooms do want! Call this "small culture," indeed! Find that the opening for Mushrooms has closed when I come to sell them. Buyers offer a price which just about covers cost of carriage to town. I ask why? They explain that "public fancy has changed; Mushrooms not in vogue-Tomatoes are."

Try Tomatoes. Try 'em out of doors, and get 'em nipped by frost. Try again under glass. Putting up glass very expensive. Gardener suggests Grapes, After buying one or two choice varieties. find gardener doesn't understand planting them! Buy book on Grape culture. While book coming, put Grape plants in cellar. Cellar doesn't suit them, it seems. Finally, when book arrives, plants have to be thrown away. Result of first year's fruit growing—loss £300. Not making fortune yet.

"Can small farms be made to answer?" somebody wants to know. Yes, if you don't mind the answer being "No."

This year try Asparagus in corner of

large field. Very successful. Think of making a "corner" in Asparagus in London vegetable market. Gardener falls in with idea, and we keep crop back for a time. Consequence is, when we offer it nobody wants to buy! Have to eat most of it myself. Get perfectly sick of Asparagus in a week. Sick of gardener, too. Dismiss him. He tells me, just as he's going, that "them Pertaters has the disease awful bad, and there ain't a Cherry on the trees because of caterpillars." Winds up by saying, "There's a bill coming in for them Sparrergrass beds."

There is, indeed. Such a bill! Seems that nothing will grow on the "pebbly loam," but that first one has to "make" the soil, and afterwards grow things. Always thought farms had good soil to begin with. What's the good of the creation, if the ground has to be made all over again?

Losses increasing. As last desperate resource try jam. Erect small jam factory. Have one or two fields of Strawberries. Find a man who says he understands all about jam making. equal quantities of jam and sugar, and boil 'em up together," he says. It sounds very simple. Sugar bill enormous. When jam made, it really does look and taste very nice, indeed. Send it to London. Letter in a few days from agent to say he can't sell my jam at any price. Too pure. Public like it with more "flavor" in it. And this comes of making real homemade jam. What a fool the public must be! Sell my farm at fearful sacrifice, and live in a "flat"-rather a suitable resi-Turn Tory. Understand now why poor congregate in large towns. Wonder if they've all been fruit farmers, like me, and made as much out of it?

LILY CULTURE.

In an article in the Journal of Horticulture, at the suggestion of a correspondent who had complained of the degeneracy of Lilium auratum, Mr. Alexander Wallace, author of the well known work, Notes on Lilies and their Culture, gives his experience in the following words:

1. Very few Lilies like scorching sunshine; they prefer a partial shade to protect their roots but to rear their flower heads into sunshine, while the lower leaves and roots are concealed by surrounding herbage. This is the natural condition of many Lilies. Therefore an eastern or western aspect is preferable to a southern one.

2. Lilies like moisture at their roots, and this, as a rule, is sparingly given. Out of the eighteen years in which I have grown Lilies, this season and one other very rainy season about twelve years ago were the very best I have known for Lily growth. The bulbs turned up at the end of the season large, firm, and with splendid new growths. The ground this year in which I have seen auratum, eximium, Wallacei and Martagon growing splendidly is a heavy loamy soil completely saturated and water-logged all the summer—the last place one would choose for. growing Lilies; yet in that stiff saturated soil-situate it is true on the slope of a slight hill, and with a gravel bed three feet underneath, through which the water flows—small offsets the size of nuts, and Walnuts, planted two years back, have been taken up this year hard sound bulbs as big as a small Orange, and larger bulbs planted one, two or three years back in equally good condition, only larger in size. I believe water does not hurt Lilies growing out of doors, though supplied in any quantity, but is beneficial. Such at least is my experience.

3. Deep planting should be practiced. These auratum bulbs are planted from twelve to fifteen inches deep, so that except in very dry seasons their roots can always revel in moisture. Before I tried (by accident) this most unlikely soil I lost hundreds of auratum yearly by sunstroke, and I found on examination the base of the bulb generally rotten, and nothing but stem roots alive. Under such circumstances no fresh bulb growth could be made, and a hot sun scorched the inadequately nourished foliage.

4. It must be remembered that imported bulbs bring with them fungus germs, which in past times used to destroy case after case of shipped bulbs. This was partially put a stop to by packing each bulb in mud, then hermetically sealing them. I believe I was the first to suggest this plan. In this way, now that the bulbs are more carefully grown and brought to the port to be packed, they come over in much better order; yet out of these a certain percentage contains these deadly germs, which develop dur-

ing the spring and destroy the inside growth with the power of a reproduction, hence every grower must expect a certain percentage of deaths. This generally takes place in June, when warm sunshine proves too much for the plants. Summary. — My experience, therefore, teaches me that, as a rule, Lilies should be planted deep in a cool sheltered aspect where they can get sunshine for a part of the day on their flowers in rich, clayey, or loamy soil (I prefer these to peaty soils) well supplied beneath with moisture. I should not hesitate in planting auratum bulbs in a ditch or at the edge of a rivulet, and I find that the longiflorum, speciosum, and Martagon tribe - do equally well in these soils, and that the Thunbergianum section grow into large weighty bulbs.

THE NEW VEGETABLE.

The Gardeners' Chronicle notices the exhibits made at some of the horticultural shows, in October, of a new vegetable which has been in cultivation for the two years past in France and England:

It really consists of the tuberous rootstock of a species of Stachys known provisionally as S. tuberifera, and closely allied to the Woundwort of our hedges. Its culture is of the easiest—in fact, nothing more is requisite than to place the tubers in the ground, as we can testify. We placed some of ours in the open border last autumn, whilst other tubers were grown through the winter in a pot in a cold-frame, and planted out in spring. Neither the one nor the other received the slightest attention on our part, but in spite of that, our carelessness was rewarded, as it ought not to have been, by an abundant crop. In flavor, when boiled, it is something between a Jerusalem Artichoke and a boiled Chestnut. We have no doubt, that with proper cultivation, we shall have a vegetable that will be of gréat service in securing variety at the dinner table, though we cannot pretend to look upon it as more than a delicacy, of relatively little value as a food crop, though the profusion with which its tubers are formed, and the ease with which they may be multiplied by using each joint as a "set," may possibly give it some value in this respect.

It requires only little experience of what a French cook can do to foresee the variety of ways in which such an artist would dish up these dainty little tubers. We may expect, as usual, some prejudice to arise at first sight, indeed, we have heard of some people objecting to them on the ground of their resemblance to caterpillars. The resemblance is not very close, but we all know how obstructive such prejudices are. We may add that the specimens we grew without manure or care of any kind, were not only abundant and delicate to the taste, but when dug out of the ground were of a silvery whiteness, recalling in a minor degree the pearly lustre of bream or whitebait.

The skin is so thin that washing only is required before cooking, and no peeling is necessary.

GERANIUMS IN WINTER.

In a late number of The Garden, a writer gives his preference as a winter-blooming plant to the Geranium. Primroses," he says, "are beautiful; Cyclamens are charming; early forced plants are delightful; but a bank of winter-blooming Pelargoniums in good flowering condition is truly grand. Even Chrysanthemums, believed to be winter flowers par excellence, have then lost their freshness and beauty, but a bank of Pelargoniums is as beautiful as ever. The colors of the flowers always seem to be so much more striking and brilliant when produced in the winter than they are in the summer months. It cannot be termed forcing to which zonal Pelargoniums are subjected in winter. They are simply blooming in the same temperature they so much enjoy during the summer months, and practically they are but blooming under natural conditions. It is so easy to have a few dozen plants in variety, including both double and single forms, prepared for special winter-bloom-

"They should be raised from spring struck cuttings and potted on into sixinch pots. After being well exposed to the sun and air during the summer, and occasionally pinched to make the plants bushy, keeping down all flower stems until the plants are packed under glass at the end of September, they will bloom profusely all the winter."

YUCCAS.

These plants are so extremely useful in a small state for various purposes, that it is often desired to propagate them rather largely, and in the case of many of them the large underground roots or dormant buds, generally known as eyes. afford a ready means for their increase. Where any are being transplanted it is often possible to take off a few of these stout, fleshy roots, which if laid into boxes or pans of sandy soil and protected by a frame, will in the spring push up a small crown of leaves. In the case of plants in pots these dormant eyes will generally make their way to the sidel; when, if the ball of earth is turned out of the pot, it will, in most cases, be possible to remove them by means of a sharp knife without injuring the plant that they are taken away from in any way. The beautifully variegated forms of Yucca aloifolia and Y. filamentosa are both propagated in this manner, and in the case of Y. aloifolia, which is somewhat liable to run up with a naked stem, it may be cut up into lengths of six inches or thereabouts, and laid in sandy soil in a gentle heat, when young plants will make their appearance from various parts of the buried stem, and when large enough they may be taken off and potted. The Garden.

RIVINA HUMILIS.

A writer in *The Garden* recommends to plant out the Rivina in good soil in a warm greenhouse, and says that in this way the plants are far finer than in pots. "The plants should be provided with good drainage, as it enjoys plentiful supplies of water when growing." He states that he has thus grown the plant eight feet in height, "and when in good health

there are hundreds of racemes of red berries as well as green ones, which, with the flowers, though insignificant, mix agreeably with the others, and make it one of the most beautiful and ornamental plants grown. A more useful plant for Christmas decoration it would be difficult to find."

ANOTHER GARDEN PLANT.

The Journal of Horticulture mentions Tridax bicolor rosea as being "very attractive, and evidently worthy of a place with other border plants from the great Western Continent. It is a Composite plant, with a flower somewhat resembling that of the single Zinnia in form. The flower heads are of moderate size and neat shape, white with a strong suffusion of clear rose—a peculiarly bright and pleasing tint. They are freely produced. The plant is compact, of moderate height, and of easy culture.

MINA LOBATA.

The botanical authorities, BENTHAM and HOOKER, according to the Gardeners' Chronicle, give Ipomæa versicolor as the correct name of the climbing plant, Mina lobata. The specific name applies to the shades of color that the flowers pass through. We have heard but little from our readers the past season in regard to this plant. The seeds should be sown in February or March, and plants grown singly in pots, afterwards hardened off and planted in the open when the weather is warm.

STACHYS TUBERIFERA.

The tubers are said to be nice boiled as Potatoes are, or they may be eaten raw in salad, or alone like Radishes.



PLEASANT GOSSIP.

SOME PLANTS.

Will you please tell me, through the columns of your Magazine, how to treat the Gesneria, what kind of soil, how to rest and whether it requires much or little water when growing?

Also, how to treat Eucharis and Belladonna Amaryllis?

C. J. C., Oakland, Illinois.

A very good course to take with Gesneria bulbs is to start them in pots or boxes some time in April. A compost of turfy loam and leaf-mold and a smaller proportion of cow manure and sharp sand is best. A single bulb can be placed in a four or five-inch pot, though sometimes from three to five bulbs are set in a large pot. The pots should be well drained. When potted they should be given a warm, moist atmosphere, and shaded from strong sunlight. While growing they need a plentiful supply of water.

The bulbs can be started earlier or later than the time named. After their dormant season, whenever they show signs of pushing they should be potted.

The vigor of the plant the ensuing year depends upon getting a strong growth of leaves and maintaining them in perfect condition. When the leaves begin to fade the water should be gradually withdrawn. When the foliage is decayed the pots can be laid on their sides in a place where the temperature is not too low, until spring. A good place for them is under the stage of a warm greenhouse.

Eucharis Amazonica is a plant for a warm greenhouse. A compost like that described for the Gesneria, with a much larger proportion of sand, is suitable. Heat and moisture and a moist atmosphere are the requisites for success. After blooming, the plants can be kept ten or fifteen degrees cooler for two or three months, without allowing them to loose their leaves, and can then be brought into heat and flowered again.

The Belladonna Lily can be set deep in a light soil in a large pot, in August, and in about six weeks will bloom. The leaves are thrown up after the flowering season. Give an airy, light place and plenty of water in order to develop strong, healthy leaves, for on the good foliage depends the strength of the bulbs for the following season. The leaves will continue green until spring, when, as they begin to fade, give less water and gradually dry off the bulbs, and then allow them absolute rest until the latter part of summer.

NEW VARIETIES OF GRAPES.

The Nectar is a variety of black Grape originated by the well known horticulturist, A. J. Cavwood, and has been, in previous years, exhibited by him as the Black Delaware. Its name was changed to Nectar last spring, and then, for the first time sent out. Mr. C. was present, last fall, at the fair of the Western New York Agricultural Society, with a collection of Grapes of his origin, and presented this variety among the rest. The fruit is borne in large clusters of medium sized berries with a heavy purplish bloom. In taste it is sweet and very agreeable. Said to be very productive.

Mr. G. also presented, for the first time, a seedling called Metternich. A very compact bunch above medium size, berries medium; the berries are like bags of sweet wine of the highest quality. Mr. C. stated that this variety ripens as early as Champion, and that the vine is a good grower, with healthy foliage, and produces abundantly.

ELLWANGER & BARRY, of this city, presented the new variety, the Mills, which they sent out the past spring. It has a large cluster of large black berries; the quality is excellent, and altogether it is very promising.

They also exhibited the Winchell, a white variety raised in Vermont. The fruit is of medium size in bunch and berry; flesh tender, sweet and juicy, and said to be very early, fipening with Hartford Prolific; vigoraus and productive.

These new kinds, though desirable for the private garden, must be further proved for their market qualities.

FRUIT GROWING AND SELLING.

Commercial fruit growers are, at this time, very generally, deliberating the question of success with their business. All branches of fruit growing are now, apparently, depressed about to the lowest point. The fact of this depression is made known by conversation, by the press, and by statements made at the gatherings of horticultural societies.

Until a few years ago, or so, we, at the East, have supposed from reports and newspaper statements that California fruit growers were exceptionally prosperous. It turns out, however, that it is impossible to market their crops satisfactorily, and the waste is very great. Undoubtedly, many fruit growers in that State have prospered, and many now are in a condition where they can at least get a living at their work, and occasionally a few, under peculiarly favorable conditions, are accumulating wealth, but these last cases are rare.

Stories of fortunes in fruit growing used to come from Florida, but for a few years past that sunny land has been put in the shade by the still brighter skies of California. Vine growing in California has been represented as the sure road to independence, and six to ten tons of fruit to the acre, we have been told, is the average yield of their vineyards. seemed very wonderful, yet the statements were made so plainly, so emphatically, and were so supported, that one would have been thought an unwarrantable doubter not to believe them. But how our trust in human nature falters when the truth, at last, is learned!

The editor of the *California Fruit Grower* has been carefully calculating the vineyard produce of California, and shows "that the average yield of the vineyards of California for 1888, based on the total acreage planted, is only one and 27-100 tons of Grapes to the acre." He also shows that, ordinarily, the California vineyards are not paying the cost of working and seven per cent. on the capital invested.

For a few years past the Grape growers of this region have found prices declining, year by year, and in order to save themselves they are now trying to solve the problem of reaching the consumer without paying so many middlemen.

Apple growers are in similar circum-

stances, and "organizations" and "fruit exchanges," and other methods of relief are now under consideration. To be short with the matter, with the present conditions of reaching the consumer there is too much fruit now raised. Can any satisfactory remedy be applied?

This is a proper subject for investigation by horticultural societies, and competent committees should be authorized to investigate it in all its bearings, and, if possible, to propose better methods of marketing fruit.

A JAPAN QUINCE.

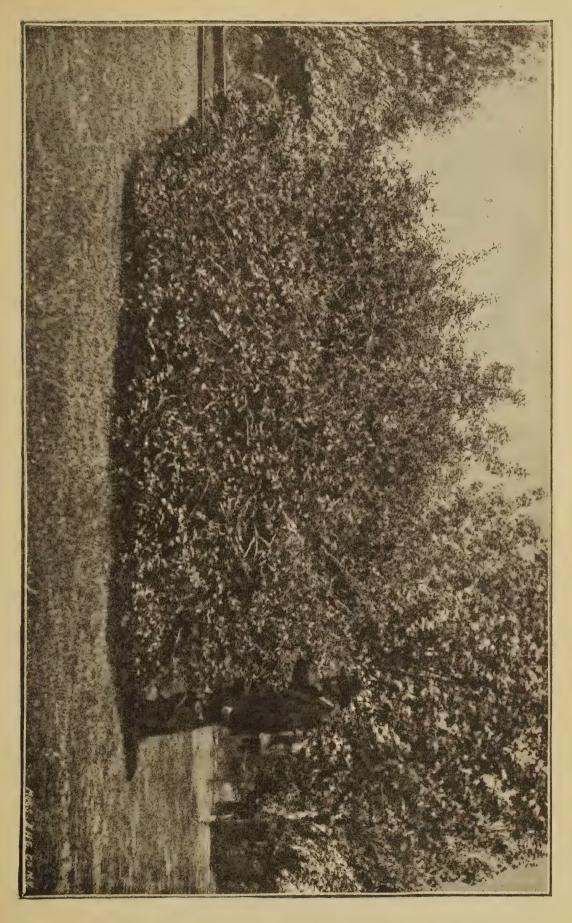
The illustration of Japan Quince, on next page, prepared from a photograph, shows what a grand shrub it will become in time, if allowed space to develop. This plant has the habit of throwing up suckers about the main stem for several years, but after a time this apparently ceases, and all grow together to increase the aggregate size. This specimen, which stands on a lawn in this city, measures about fifteen feet through it, and nine or ten feet high. When in bloom, in spring, nearly covered with its scarlet blossoms, it is a brilliant object.

OUR YOUNG PEOPLE.

The good conduct of the Young People's department of the MAGAZINE is assured for the present year by the continued assistance of Mrs. Butler, who, as Aunt Marjorie, and by her own name, is now so familiar to our young readers. Her contributions, which are always interesting, are particularly valuable by a moral force they possess, and no young person can read her writings from month to month without being influenced by her love of truth and purity, and that fraternal good will which is the highest phase of our human nature, and our best conception of its union with the divine.

FUCHSIA BERLINER KIND.

The colored plate in this number shows this beautiful double Fuchsia somewhat reduced in size, which is unavoidable, but otherwise it is very truthful. This plant is a vigorous grower and free bloomer, and altogether the finest double white Fuchsia that has yet been produced.



CHRYSANTHEMUMS.

Poets connect romance with nearly every flower, and Chrysanthemums enjoy a German legend and romance, while being also a Celestial favorite, for they are esteemed by the Chinese as highly as the Rose is by all other nations. Paris they are so much loved that they are mounted on green moss in the manner of Roses for table decoration, whose purples shade to light, faded tints of blue violet, or crimson tone down to pale pink; but there are no jarring combinations of red, yellow, purple and pink, as in London florists' windows. The new named specimens, called Jubilee Chrysanthemums, were much admired at the Royal Flower Show held at The Aquarium, especially the Japanese type. One hundred dollars were given in prizes, which may seem a small amount to an American, but is considered very much in London, it being an honor sought for in a floral sense. Mrs. H. Cannell, pure white, with immense petals; Edwin Molyneux, in deep, rich maroon-red, with immense petals; Lady Emily, creamy white, with almost vertical petals and forming into a ball, and the Délaux, entirely new, 1887, but it could not compare with Edward Audiguter, of a rich purple, lightly suffused with magenta. These were the most beautiful of two hundred varieties.

My studio is at the entrance of Temple Garden, where many barristers have their chambers and law offices. To-day there was the largest show of Chrysanthemums ever known in London, and a chat with the gardener was as follows: That the reflexed flowers are most desirable of all specimens, claiming Cullingfordii, the scarlet crimson Chrysanthemum unequalled for beauty, distinction and value. Temple of Solomon, Mount Etna and Gazelle were favorites of the first class.

The Pompons, especially the yellowish white, New York, Adonis, rose purple, excited general admiration.

Old barristers and judges threw aside the gown and wig and wandered up and down the garden as merrily as they had done when youngsters, and the sight of flowers must have awakened old recollections, let us hope pleasant ones. Prettily dressed ladies noted the names of every new specimen, and regretted there were none for sale—it is always a regretable fact, for at floral exhibitions one sees ever the best, and a desire for the unattainable has a new charm.

The German legend accounts for the love of the deep purple ones, and their prolific growth; every peasant has a plot of purple Chrysanthemums and generally of the commonest species, and especially in the southern part of Germany I noticed that young girls called them Remorse Flowers, yet wore them in breast knots. Young maidens know nothing of remorse.

A German romance for every flower, I said so in my last letter, and Chrysan-themums are the first to ask for an honorable mention.

CHRYSSY was a devout maiden, who lived on a mountain in the Black Forest, and occupied her time in making her wedding garments, as all German maidens do from the age of eleven, hence, when the good man comes, later on, she has her outfit and a large chest of linen, and knitting for the poor; on week days for her friends, and on Sundays for the poor, and it is considered no sin-charity covers the occupation with a corner of her broad mantle, but I fear if there were no Sunday the poor would often go barefooted in Germany. She was the pride of the village, and always wore Chrysanthemums when in season, hence her name. Loved by a Duke, she loved only the young priest of the little church, who returned her love and could only speak it through the flower. Finally, they flew, or escaped from the village, and after weeks of weary travel, saying their prayers night after night with leaves of the dried Chrysanthemums, living upon pounded Corn and goat's milk, not daring to apply for food from the good farmers, for fear of detection, they arrived at a small village, and there remorse came to them, both fell ill, and a spirit appeared and she was clothed in a robe of purple Chrysanthemums. Can this be Remorse and Chryssy?

The legend goes on that she died, and that he remained where she was buried and grew these Remorse flowers until by the sale of them he had money enough to build a little church, he working day by day with the laborers in hewing the rock and aiding erect the little chapel. He died and was buried near by.

I have visited the little chapel—deserted—and have been told that it is a shrine for plighted lovers, who go there to pray for their happiness, and that the ghost of Chryssy appears when any trouble is at hand, always holding in her hand the Remorse Flower. Simple as the legend may be, it gives one a sad impression of a royal colored flower, which for mantel decoration has no equal.

A Chrysanthemum of the Japanese type brings a shilling each in London, a Rose can be had from sixpence to ten-pence.

Foliage of bright leaves, such as Strawberry leaves and wild Rose vines are sold at high rates, and afternoon tea tables are trimmed with Virginia Creeper.

In all ladies' journals one sees advertisements inserted by ladies desiring to sell flowers and foliage, competing with florists in price, and at large houses, like the military stores and army and navy stores, ladies send in daily flowers in quantity, which are sold at a moderate price, at the risk of owner, who has a liberal share, too, of the profit. I know of no employment so agreeable, profitable and remunerative as the culture of Roses, Hyacinths, Geraniums, Carnations and Violets, for ladies, if they have the energy to sell them, and florists in Paris claim that this profit upon breast knots and nosegays for gentlemen is two hundred per cent., and the quantities sold are not perhaps as great as in New York city, for ladies do not wear flowers in the street: but French gentlemen change their bouquets perhaps many times during the day.

Peaches in London bring four shillings each, and in Paris a little basket contain-

ing six brings four dollars.

Turtles, American oysters and crabs adorn the window of a famous pastry cook, while flowers and fruit grace the window of his next door neighbor, whose next door neighbor has Chestnuts sugared, and all kinds of bon-bons, interspersed with rare Orchids.

American newspapers, especially illustrated ones, are found side by side with French journals, loud in their caricatures of German doctors, and the most fashionable flower of the moment is Chrysanthemum.

ADA LOFTUS.

TEN-WEEKS STOCKS.

One of your correspondents said that she had poor success with Ten-Weeks Stocks, though the seed was expensive and the cultivation the best. My experience has been quite the contrary.

For the past two years, in spite of the dry weather, which injured most other flowers, my Stocks have been so beautiful that I thought I ought to tell other amateur florists. I now start the seeds earlier than formerly, and find the best results when they are planted near the first of April. When planted later they grow as well, but we lose much of the long blooming season.

The seeds were not of any specially expensive sort, but I have had every desirable shade and color, with only a very small percentage of single flowers, and really I do not mind a few of them, as the fragrance is as delightful as that of the double. They were advertised to be as large as a twenty-five cent piece, but I had very few so small; many of them were as large as a fifty cent piece, and most of them nearly as large.

The pure white and cream shades were lovely. Then I had many of a creamy pink, like a Tea Rose, and all shades, running from light pink to deep, and from crimson to maroon and nearly black.

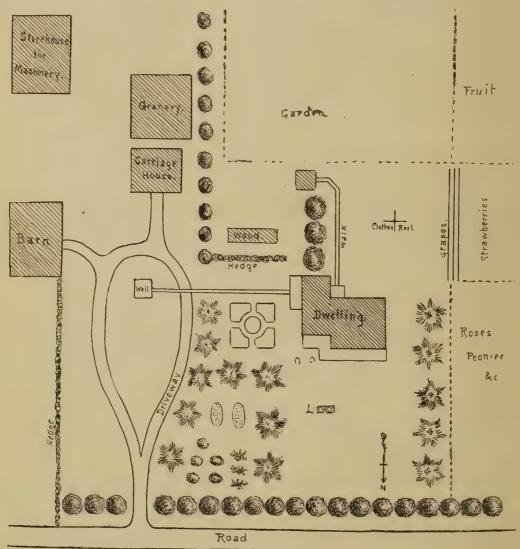
The plants commenced to bloom early in the summer, and in August, when most flowers were so dried up, they were in perfection, every plant completely covered with flowers, and none of the leaves burnt and dry, as were most plants. I kept cutting the flower stalks, and new branches started to take their places, and went on blooming, till now, after the middle of November, they are covered again so that you can hardly see where branches had been cut away. The hard frosts we have had have not hurt them in the least, and I have never covered them, as I did not intend to take up any for the house this year. They blossom nicely in the house for a time, if one cares to take them up.

These plants have never had any special care or attention, and the soil is not particularly good. Now, this good account is not only for this year, but always have good success with the Stock, whereas I cannot say the same for some other flowers. I try to raise so many

that frequently they do not have as much attention as they ought.

Another desirable quality of the Stock is that the cut flowers will keep for a long time, if placed in water or wet sand the stalks will keep on growing and the buds expanding for three or four weeks; also, they do not wilt readily when out of water for a time.

weather, and picked off the first buds from the plants till they had more strength for flowering. He was rewarded for his little trouble, as his Pansies took the first premium at the fair, and all the fall we have had them for ourselves and to give away. They average two and a half inches, many are larger; sometimes I find one that measures three



I think that many would cultivate these flowers if it were generally known how many desirable qualities they have and how easy it is to have success with them, My collection of Stocks took first premium at the county fair, which occurred so late that there could not be a very large variety of flowers. Many people who never raised them have expressed a desire to try them since seeing these.

I have, this year, been unusually successful with Trimardeau Pansies. My boy watered them some in the dry

inches. They are also in more desirable colors and markings than I have had in Trimardeau before.

M. C. S.

GROUNDS OF A COUNTRY PLACE.

The illustration of the grounds of a country place, on this page, tells its own story, though a few words in connection may not be inappropriate. The original drawing was received without any letter in relation to it, or any signature, and therefore we are ignorant of the proprietor or the location of the place. What is

to be commended is the orderly arrangement and the evident design to beautify the place, as the sketch shows. The failure in this last respect is conspicuous. The trees planted in rows along the front, along the driveway, on the lawn and at the side of it are all in bad taste. All of that end of the lawn next to the driveway is covered over with trees and shrubs and cut up with beds. A worse arrangement could scarcely be devised. Although no scale is given, yet, judging from the size of the spaces allowed for the dwelling and the other buildings, the area of ground allowed for ornamental purposes is sufficiently large to admit of planting by which good effects might have been produced. Why the Roses and Pæonies. &c., should be in disgrace and be cut off from view from the house by the row of evergreen trees, one can only wonder. When the contrast is noticed between the arrangement of this place and that of which illustrations were given in our last volume, commencing on page 323, the deficiencies and bad taste become glaring. We dislike to criticise severely, and the only object of introducing the illustration is that all may see how a place may be disfigured by bad planting. And all this has come to pass when the intentions of the owner have been most commendable.

FALL PRUNING GRAPE VINES.

A recent article in your MAGAZINE advises fall pruning for Grapes. There is much in it with which I agree, but as to fall pruning being always the best is not in accord with my experience. I have twenty-six varieties which I attend to myself as a recreation from literary pursuits, call it a hobby, if you will, but it is a great pleasure to me, and I believe the mental diversion of equal profit.

The best time to prune depends upon climate and location, for which no arbitrary rule can be laid down. In the far north, or where vines are laid down in the winter and covered, fall pruning is the best, for the wood is thus protected and ready for the early spring growth. In warmer climates, where vines are never injured by winter, I would prune in the fall; but where vines are exposed to changes of climate and severe winters, spring pruning is the only safe policy, for the reason that vines cut in the fall are

more liable to die back than when pruned in the spring, when the dead wood is easily detached. If vines that have suffered by exhaustion from heavy crops are cut in the fall a hard winter will almost destroy them.

I will say further, it is not safe to cover vines in the winter in a climate subject to warm changes, unless buried in the earth. for the reason that vines covered with straw and leaves are in some danger of having the buds swell, to be killed by a falling of temperature. There is, also, a difference in Grapes. Black Grapes will stand more trimming than red or white, with few exceptions. In fact, there are so many things to take into account that no arbitrary rule can be laid down, and each raiser must exercise that degree of care and skill required of a careful business man. With such care, I believe there is no fruit that can be produced with so little expenditure of money and time, and yield so large a return as Grapes.

E. R. Monfort, Cincinnati, Ohio.

TREATMENT OF GRAPE VINES.

I have pruned most of my vines in the fall for several years, and found all the advantage from the practice that H. K. enumerates in the November number, page 331. In one regard, however, I work differently. Instead of doing the pruning "as late as possible with comfort," I begin on the earliest ripening wood, like that of Moore's Early and Worden, as soon as the leaves change color, which in those sorts and in Pocklington, they do as soon as the leaves in the woods, and usually before the first frost, say mid-October, here. The advantage is, that enough of inspissated sap will yet ooze from each wound to film it over with a waterproof protective varnish, like that of the ripe bark. When the pruning is done with shears, and the cut consequently bruised and rough, much more of this material is necessary for the protection from drying winds and corroding air of the moist, fresh wood beneath. These extra hardy sorts I grow on horizontal trellisses of wire, or overhead on bowers or arbors, or on frames over a shed about three feet above the roof, and having the same slant, the wires, or part of them, about eighteen inches apart to allow of the head and arms rising through for pruning, for distributing and tying down the canes left for bearing, for thinning the young thyrses of fruit, for stopping growth where necessary in June, and for gathering the fruit.

Sorts of later and softer growth, with larger buds less perfectly varnished, like the hybrid sorts generally, are easily laid down, as H. K. advises, after they have been pruned, and held close to the breast of mother earth by a stone or block, or old piece of iron casting which is kept at hand for the annual purpose.

As to the manuring of Grape vines, I find nitrogenous matter productive of large, luxuriant foliage, but inimical to early ripening of the wood, and, as I think, to the flavor of the fruit. None of my vines do so well as those which are partly mulched with their own prunings and other rubbish, fed, in fact, like the unfailing growth of the forest, with their own waste. Yet, even in the forest, we see the trees stunted and showing dying or dead ends of branches, where the winds annually brush away the leaves and litter from about their feet. So in the vineyard, if we carry away the waste, we must bring something else to replace it or the growth will deteriorate. We find a good compromise, satisfactory both to neatness of appearance and to economic nutrition of the plants, in snipping the prunings of Grape vines, Raspberry plants, &c., into lengths of not over a foot, and letting all lie tidily and thickly, so as to hide and protect the surface, keeping it clear of weeds, open to air and rain, and supplied with humus close about the feet of our plants. No item of our garden work gives better or surer returns with a minimum of labor than this.

I never burn up waste. The coarse litter of pruning, cornstalks, tomato haulm, &c., which serves during winter to protect Strawberry plants, &c., when raked off in the last of March is packed into a trench that was dug expressly for the purpose across a garden bed in November or December. When all the litter is packed in it, the soil is replaced, and on this ridge of light, dry soil, thoroughly mellowed by the frosts, we sow Radishes, Salad, or early Peas, and later plant Tomato vines, or Cucumbers, or Squashes, which make a growth that well repays the work. The work is nothing of an extra—the digging must be done sometime, and it is easier to do in early winter than in busy, sloppy spring. And the litter must be gathered up and is quite as easily put into the trench as into a wasteful bonfire. Some will say that the fire destroys eggs of insects. I don't find that I have any more trouble from insects than those have who burn what should go to protect and feed the soil. Nor do I find the profusion of litter with which nature enriches the woodlands a breeding ground for injurious insects to so great an extent as our more artificial course of practice. W.

THE VINEGAR TREE.

A neighbor who lived nearly a year near Jefferson City, Missouri, tells me that the people there have what they call Vinegar Trees. The trees, he says, are a foot to a foot and a half through, with the general look of the Cucumber tree (Magnolia accuminata). The trees are tapped as Maples are, but he couldn't tell what the process was after that, whether the juice is vinegar as soon as it runs or not. One would naturally suppose it might be a sweet sap turning sour, but, if so, why not make sugar? Possibly it is inverted sugar (glucose). Readers who are posted will please describe the Vinegar Tree and the vinegar process.

E. S. G., Canaseraga, N. Y.

PLANT NOTES.

Pierre Guillot is the queen of the Hybrid Tea Roses. Large and full, fine form, color rich crimson shading into bright carmine. My little plant bedded out in June gave me grand blooms in July and August, and in spite of hard frost has large buds October 25th.

It is a pleasure to find, at this date, perfect, full blown Roses, and lovely half open buds, as I do on a Hybrid Tea, name lost, and on a Polyantha Rose Mignonette. This last named variety is perfectly hardy here at the north, with protection of evergreen boughs.

The new Hybrid Perpetual Mrs. John Laing, has bloomed for me the past summer. It is a grand Rose.

Farfugium grande, to which I gave a brief reference in the April number, is highly ornamental on a bracket, quite eclipsing my pet Begonias, with the exception of Begonia manicata aurea, with its bright green leaves blotched with pale

yellow and white. This is a finely decorative Begonia. Farfugium has a cluster of buds nestling in the center.

Mrs. M. D. Wellcome.

CHAUTAUQUA HORTICULTURE.

At the first winter meeting of the Chautauqua Horticultural Society, after some routine business was disposed of, U. E. Dodge brought up the subject of the depredations of fruit thieves. He advocated the formation of a secret society for mutual protection, the funds of which could be used to employ a special police. A committee to make a formal expression for the society was chosen, who reported the following, which was adopted:

Resolved, That the spirit and sentiment of the Chautauqua Horticultural Society most heartily co-operates in all measures calculated to suppress the petty thieving of fruits and vegetables which has been so troublesome, and that we do all in our power to protect the interests and property of each other, and that we would further advise each town to organize a society for mutual protection.

A. P. PHILLIPS, U. E. DODGE, J. J. KEYES, Committee.

On the regular topic—Winter Management of the Vineyard—opinions differed as to fall plowing. On young vines, first and second year after setting, furrows turned toward the vines may be a protection. On old established vineyards making a heavy growth of canes, and on light soils the opinion in general was against fall plowing.

Mr. A. S. Watson had practiced, with good results, sowing winter Rye in his vineyard, about August 25th. In May following this is plowed under, and helps the fertility of the vineyard, and also serves for winter protection. But while many opposed fall plowing, there was, on the question of summer cultivation, no dissent from the view that from about

May 15th to about September 1st, some fourteen weeks, there should be frequent going over the ground with a light one or two-horse cultivator, with one or two hoeings, to destroy such weeds as escape the cultivator. Many of the best vine-yardists go over the ground eight to ten times during the growing season. Fields so treated will stand the severest drouths with almost perfect immunity from damage. The foliage will preserve its rich, dark green, and all the clusters attain the fullest perfection of size and quality.

At the next meeting, at Westfield, the subject of "Lessons of 1888, on best methods of marketing," will be considered.

Secretary.

A NEW RASPBERRY.

"Thompson's Early Prolific Red Raspberry" is recommended especially for its earliness by its introducer, Mr. M. T. THOMPSON, of Ohio. Its long name will be cut down, by usage, to Thompson. It is described as quite hardy, having stood uninjured exposed to a temperature of 22° below zero. The originator planted out an acre of it in the fall of 1887, and last season, he says, it was loaded down to the ground with the weight of berries, about the size of Brandywine, from two to three weeks earlier. He describes it as a strong, healthy grower, dark foliage, free from rust or mildew, bright red color, looks as if it had been varnished. A splendid shipper, but not quite equal to Brandywine.

A HAPPY NEW YEAR.

"Our Young People," we are sure, will reciprocate the "New Year's Wish" which Mrs. Bartow has expressed in the acrostic lines and emblematic illustration in this number, and wish her, in return, during the coming year, "ways of pleasantness and paths of peace."



OUR YOUNG PEOPLE.

COUSIN CLARA'S LETTER.

"Yes, Franz, you persist in talking hopefully, but I'd like to know what the Christmas, just past, has brought to you besides that broken limb? Even the colt that threw you must break his neck so that you can realize no money from him. He certainly ought to have paid your surgeon's bill."

"Amy! don't, please."

"O, you blessed brother, you've all along talked to me beautifully of cheery resignation, even when you were white around the lips with pain, and I've tried to simulate it for your sake. But you've shown enough of the genuine article for both of us, and now what has it brought you?"

"Much. A constant succession of fresh flowers in my room, besides many dainty tid-bits, and look——."

"Your resignation didn't bring them, they'd have come, any way, though they neither heal your limb nor fill our purse."

"—and look at those two pictures. This one of 'Christmas morn,' hanging where my eyes can gather restful thoughts from it, (how well our clergyman's wife knew just what to send me,) and that one, from my old tutor, representing the New Year as a majestic figure, star-crowned, with trailing robes fading into the rosy light from whence she emerges, one foot upon the first of those twelve stepping stones - the months - and with arms a-spread as though to bear us along with her as she passed by. Both of these pictures rest me. This one embodies a hopeful promise for eternity, that one for time. Don't you see?"

"Not as you do. That one I cannot look at without expecting to see the skeleton of old Father Time spring up beside her, and shake his hour-glass and scythe at me, as though to warn me against her delusious."

"Why, Amy, dear girl, can't you enjoy the luscious tintings of such a picture the lovely contour of the figure, the foot, the arms, the poise of the head—without conjuring up something to spoil it? You are not yourself this morning—are you sick?"

"I am quite myself this morning, and am not sick. But do pictures hanging on the walls cure broken limbs?"

"Poor Amy. Can you realize how it would seem to be unable to see either form or color?"

"I haven't thought about it."

"Poor sister," he said, covering her nearest hand with one of his own, "things must have gone more amiss with you of late than I have known. Sit down close by me, please."

"Franz, Franz! don't you dare pity me. I need no pity. I am only growing desparate—yes, bitter, because everything goes wrong with you. It's two weeks since the fracture, and still the bone is not uniting, but paining and torturing you. I'm frightened about the result and worried lest all your plans for the future are to fail-plans to which even our father consented when he found he could not make a grand musician of you, poor man. He little knew of the reverses in store for us, and how we'd have to pinch and save in order that you might realize your longing to help your fellow men. And he little knew that his sister's daughter and I-though 'only girls,' he called us-would alone inherit his musical ardor, although not gifted with the masculine touch of a master-hand, like his

"Often, in fancy, have I supplemented your good work in the future, churchly or otherwise, with my music, and could feel the joy and pride I knew I should realize in seeing you take your place before men as one befitting his mission. And now, Franz, here you are—oh, I cannot bear it. Nothing good comes of my trying to be hopeful and patient, and of your really being so."

"Can't you have faith in the future?"

"No; I've tried to, but things go steadily wrong."

"Thoughts of your Crocus beds under the snow should teach you faith. But

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listen. Even if I were to lose my limb, or a portion of it, with eyesight left, I could still complete my study-course, don't you see, and enter upon my line of work just as I've planned. So be hopeful.

"And you with only—only one—."

(Sobs.

"I should have two good hands and arms, two keen ears and sharp eyes, the full use of one tongue, and one royal good sister to stand by me. How rich I should be. Besides, as soon as the money could be spared, I should have an artificial limb and foot so shapely and springy that you couldn't tell 'which from t'other.' But the very first money after my studies is to go for a new grand piano. Our father's has served its time."

"Indeed, it won't."

"O, well, we won't quarrel about that now. My leg isn't off yet. But we'll get on cheerful faces at once, and not let the good doctor catch us in the blues. How is poor grandmother this morning?"

"She's just the same as when you last saw her. Still thinks that I am our mother, and reproves me for dressing so like a young girl—says she wore a cap when she was a young married woman—and that it is very unbecoming in me not to wear one—looks as though I wished to catch the attention of young men again. Since she's lost sight of you, these two weeks, her mind has gone back to when you were a baby, and yesterday she cried because I would not carry you up stairs and let her lullaby you to sleep. Poor old Dinah, in the kitchen, worries about her."

"Does she dislike to have that neighbor girl stay with her?"

"No; the child says she is quiet when I am out of sight, and when not sleeping she still entertains herself reading those same books, alternating from one to the other as though they were new, forgetting that she has ever seen them before. What a blessed thing she didn't forget to read."

"I fear, however, the care of her is going to be too much for you. Perhaps we might better have let her go to aunt Emma when she sent for her."

"O, no, indeed; think of what she has done for us—beginning when I was a baby. Besides, she is not aunt Emma's mother, only her dead husband's; and

not many women in her place would offer to do such a thing."

"Because not many women have such noble, generous hearts as hers. She's one grand woman, and cousin Clara is her mother's own daughter. How bravely she went to work, after their cozy home was destroyed by fire, to make her piano and violin help build another one. But there is the door-bell, Amy; perhaps it is the Doctor and his consulting surgeon."

The moment Amy left the room, the long repressed expressions of pain found vent in moans as a partial relief to the tension of nerves long held in abeyance.

Amy soon returned, exclaiming, "It was the postman; he brought a thick letter from cousin Clara, and as you are not suffering so much as sometimes you are, I've come right in to read it aloud, because you always enjoy her letters. She begins:

"'DEAR COUSIN AMY:—I feel inspired to write you to-day. I must do it, though very busy. Last night dear Nellie—cousin Frank's wife—came and took mother and myself off to a concert, given by a blind man—Edward Baxter Perry—but it was far ahead of all concerts given by the blind that we have ever heard. He is an artist, and instead of feeling his way on the piano, he has no hesitancy in lifting up his hands and plumping them directly down on just the right keys. How he makes his bearings so accurately I cannot tell.

"'Cousin N. said of herself, 'I have always been stumbling through the world with my two eyes, and look at him.' I told her, no, she always glided through, and I wanted to add, in a 'good fairy'like way, but did not dare. I gave her your love, and explained that the message impulsively leaped from your lips when you learned of the beautiful brocaded cloak she had given me after the fire-pretending she could not wear itand I also told her what you said about her being brocaded all over with gloryspots in the next world. How she did laugh, saying you must be a girl of very vivid imagination. Then she asked to see your picture. That request almost startled me. Personally, I don't see the need of your face set in a frame on the mantel, because it is so clearly set on the retina of my memory, and so full and busy is my life these days that I had

hardly realized that I had none. But you'll please remember me in the future

when distributing your pictures.

" 'You can hardly imagine how mother has renewed all her old musical energies -the working part, I mean. Plays the organ for every Sunday morning service, drives Dolly two or three times a week to families out of town, where she gives piano and vocal lessons in music, and when she suspects me of over exertion insists upon assuming some of my duties -says she shall thump out a few of the bricks for the new house herself-that I can't be allowed to do it all. Such a busy world. In which of Mrs. Whitney's books does Glory McQuirk figure? A good servant she was with much common sense, who often said, with touching pathos, 'To think there are so many beautiful things in the world, and I'm not in

"'Although so busy, a 'schoener zeit'* came to us last evening through dear cousin N., and we are always sure of a few home pleasures—our books and magazines, our letters from dear friends, as well as calls and visits, and our piano—the latter, I mean, when used as a recreation.

"'We are now reading together 'Musical Memories,' mostly of Wagner, very interesting. Last Tuesday I read, per appointment, a paper on Beethoven, at the Tourist Club; did not know, until I had read him up for the article, how eccentric a genius he was. Now that this Club, the Shakespeare Club, the choir meeting and Wednesday evening church lectures occupy four evenings weekly, Sunday evening organ service making the fifth out of seven, I am wondering why there can't be more days in a week.

"'Then, every once in a while, comes an extra in the shape of a good lecture or concert. We feasted on two of the latter last week. One, 'The Boston Symphony Concert,' under the auspices of our Educational Bureau, the other, Perry's 'Recital' of last evening—a treat furnished by our Conservatory of Music. The same source furnished songs from Franz, by one of their young girls, and a violin solo by a professor, which were interspersed through the 'Recital,' making a change which rested the blind performer

and furnished a good foil for his following.

"'I wish you could go to church with me to-night and enjoy our 'choral service.' We sing all the versicles and all the 'amens,' all the chants and hymns and all the psalter. This reminds me that I must not tire myself, even with over-much writing to you, if I want to do good work this evening.

"'Remember me to cousin Franz. I suppose he is making great strides toward the goal he hopes soon to attain. We set great store on his promising future. Love, much love and good-bye, from COUSIN CLARA.'"

"How brimming full of music and good solid culture their lives are," Franz hastened to say, lest Amy should make forlorn comments on the closing paragraph of the letter, "and yet they are both bright and happy. What a lesson to idle, listless girls who have the leisure to complain of *ennui*."

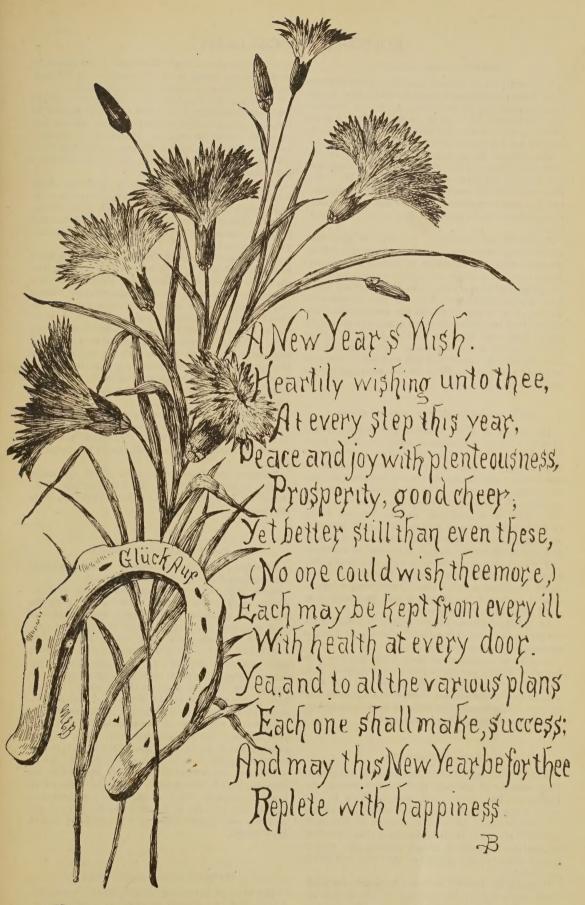
"And what a lesson to me," rejoined Amy, "is that blind musician. You said. 'if your eye sight were left you, your studies need not be abandoned,' but it made no impression on me. Now I realize what it would really be were the loss of your eye sight threatened instead of that of your limb. I am ashamed, too, that I would not let my own eyes see anything lovely in tint nor outline—glancing at the pictures-not even to please you. And if the doctors should have decided that you must have an operation, it would have taken all the courage and heart out of me. But now, if it have to be done, I shall help you to be brave, and can be truly hopeful and cheery."

"And that," smiled Franz, "will make it all so much the easier for me. Truly, cousin Clara's letter was a god-send this morning."

Our story proper is now ended, but the brave Franz must not be left thus. The surgeons decided that the splintered ankle would not heal, that to get quite above the extended inflamation the amputation must be so near the knee as to interfere with the proper fitting on of an artificial limb, and that therefore the operation must be above the knee. This was done, and now very few people suspect the presence of an inanimate foot in the firm tread of our noble Franz.

MARIA BARRETT BUTLER.

^{*} Beautiful time.



EDITOR'S MISCELLANY.

HORTICULTURAL MEETING.

The thirty-fourth annual meeting of the Western New York Horticultural Society will be held in this city, commencing at 10 o'clock A. M., on Wednesday, the twenty third day of January, 1889. It is expected at this meeting to reach a final decision in regard to making the society a State society.

The officers intend that this shall be one of the most interesting and profitable of its meetings, and are making preparations accordingly. In order, however, that the meeting shall be entirely satisfactory the members should all be present, and be ready to contribute their experience and advice for mutual benefit.

Another most important requisite is that they should bring with them their neighbors and fellowworkers, with the intention of joining the society. From one and another of natural causes, members are dropping off, and those who are left must make some special exertion to keep up and increase the number, if it is expected that the usefulness of the society is to be continued in the same way as in the past. This may be done and exceeded by a little personal effort of the members. We hope and expect hereafter to report that this was one of the best attended and most useful of all the meetings the society has ever held.

WILD FLOWERS OF THE PACIFIC COAST.

The author of Wild Flowers of Colorado, Emma Homan Thayer, has prepared a similar volume illustrating some of the beautiful flowers of California and Oregon. Miss Thayer's work consists of sketches of plants and flowers in water colors, and an accompanying text. The sketches are excellently reproduced in colored lithographs, and, with the text, form a magnificent quarto volume, being printed on heavy paper, in large type, and bound in an elegant, artistic, illuminated cover. Miss Thayer is particularly happy in the narration of incidents and adventures in connection with the plants employed as subjects, and as artist and author she is entitled to great praise. Besides achieving a reputation it is hoped her devotion and enterprise may yield an ample pecuniary reward.

An excellent feature of this volume is a final chapter giving the correct botanical names and descrip-

tions of the flowers presented.

Cassell & Company, of New York, are the publishers of this as well as of her former volume. The Wild Fowers of the Pacific Coast and the Wild Flowers of Colorado are companion volumes that will not fail to gratify the taste of those who admire beautiful flowers and handsome books.

LITERARY NOTICES.

Milch Cows and Dairy Farming, by Charles L. Flint, author of Grasses and Forage Plants, &c. Publishers, Lee & Shepard, Boston. This is a revised edition of a work already favorably known. The author says "the earlier editions of this work met with so much favor as to show that a practical treatise on the dairy is greatly needed, and that an honest effort to keep abreast of the times will still be appreciated."

It would be difficult to name a topic in the whole range of the dairy interest which is not in this volume well elaborated; the only notable exception being that of ensilage, and in regard to it the author is ominously silent. But the subject of feeding is by no means neglected; it is discussed in all its bearings and in view of a great variety of foods.

"In winter the best food for cows in milk will be good sweet meadow hay, a part of which should be cut, and moistened with water, and all inferior hay or straw should be, with an addition of root-crops such as Turnips, Carrots, Parsnips, Potatoes, Mangold Wurzel with shorts, oil cake, Indian meal or bean meal."

Mr. Flint's long experience in practical dairy work, and his special studies of every branch of it, make him a high authority. The book is finely illustrated. There are few farmers who would not find it to their advantage to read it, and keep it for frequent reference.

Mother Goose. Cassell & Company, New York, have issued this children's classic in rhyme set to music, and each page with colored lithographic illustrations. It is an elegant song book for the nursery, and with a singing, affectionate aunt, or even a tunefully inclined uncle, as memory reminds us, the children can be kept in a state of pleasant amusement at any time. It can be made a great source of solace and enjoyment to childish hearts. The music is simple and appropriate, and will prove a delight to the nursery. The cover is in exquisite design. All young children should have such pleasures as this book affords.

Nervousness: Its Nature, Causes, Symptoms and Treatment, with notes of cases, by H. S. Drayton, A. M., M. D. Fowler, Wells Co., New York, A worthy treatment of the subject, issued in pamphlet form.

Forward for Ever, Heaven on Earth, and other poems, by William J. Shaw, the Poet Hermit. Published by Fowler, Wells Co., New York. A little brochure.

BLAKE'S WEATHER TABLES.

Weather Predictions according to Mathematical Calculations based on Astronomical Laws,

Such is the title of a pamphlet issued by C. C. Blake, of Topeka, Kansas. The tables give the maximum, minimum and average temperatures of each month of the year, and also the average temperature of many years. The whole country is divided into eighty portions, and the calculations made for each portion. In the same manner the rain or snowfall for each portion is given and compared with the average for that locality. It is a bold piece of work by Mr. Blake, and there is no doubt that he believes in his own ability to foretell the general condition of the weather for at least a year ahead. His career, however, as a weather prophet will be at an end if his predictions this year prove false, and it is to be hoped they may, not on account of any way they may affect Mr. Blake, but because, if true, the country would be visited with a great calamity, for a drought unprecedented in extent and severity is foretold, to involve all the northern and eastern portions of the country, including Canada.

PENNSYLVATIA HORTICULTURE.

The State Horticultural Association of Pennsylvania will hold its annual meeting at Lewiston, Pa., January 16th, 1889.